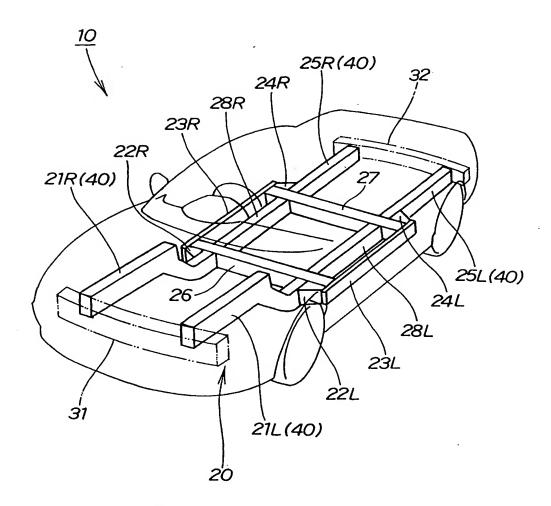
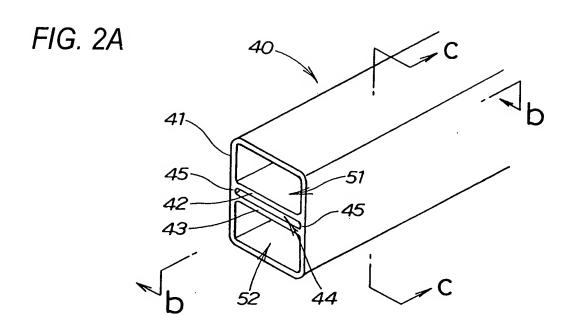
Inventor: KASUGA
Docket No.: 12844.0056US01
Title: VEHICLE BODY FRAME
Attorney Name: Curtis B. Hamre
Phone No.: 612-336-4722
Sheet I of 10

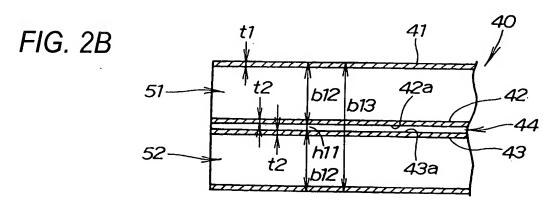
FIG. 1

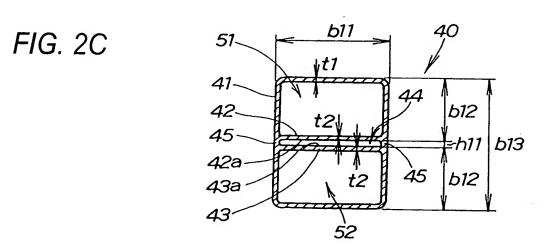


Inventor: KASUGA Docket No.: 12844.0056US01 Title: VEHICLE BODY FRAME Attorney Name: Curtis B. Hamre Phone No.: 612-336-4722 Sheet 2 of 10

2/10







Inventor: KASUGA Docket No.: 12844.0056US01 Title: VEHICLE BODY FRAME Attorney Name: Curtis B. Hamre Phone No.: 612-336-4722 Sheet 3 of 10

FIG. 3A

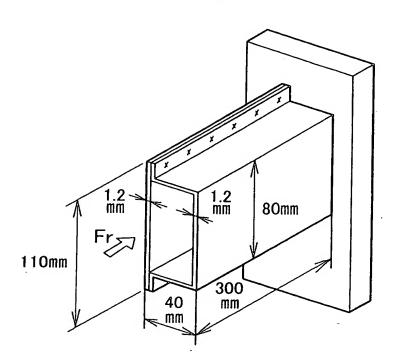
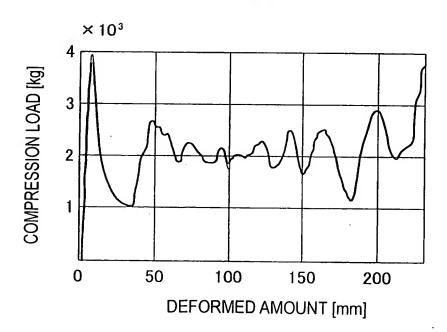


FIG. 3B



Inventor: KASUGA Docket No.: 12844.0056US01 Title: VEHICLE BODY FRAME Attorney Name: Curtis B. Hamre Phone No.: 612-336-4722 Sheet 4 of 10

FIG. 4A

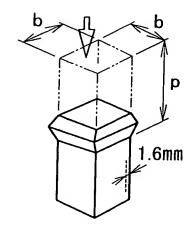
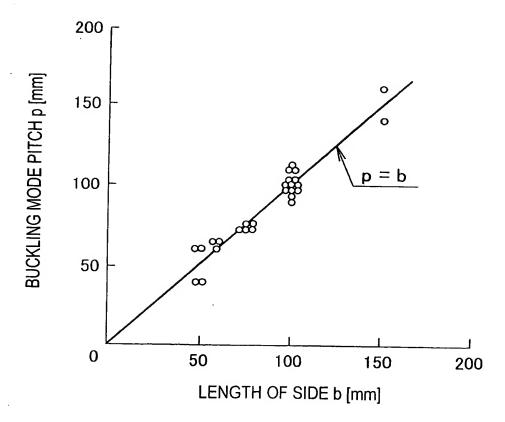


FIG. 4B



Inventor: KASUGA Docket No.: 12844.0056US01 Title: VEHICLE BODY FRAME Attorney Name: Curtis B. Hamre Phone No.: 612-336-4722 Sheet 5 of 10

5/10

FIG. 5A

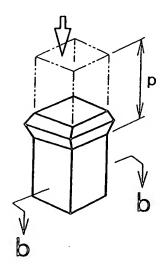
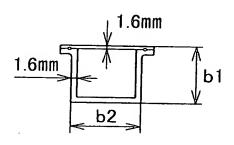
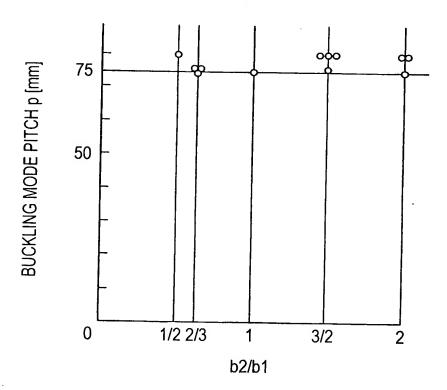


FIG. 5B



$$b1 + b2 = 150 \text{ mm}$$
(CONSTANT)

FIG. 5C



Inventor: KASUGA Docket No.: 12844.0056US01 Title: VEHICLE BODY FRAME Attorney Name: Curtis B. Hamre Phone No.: 612-336-4722 Sheet 6 of 10

FIG. 6A

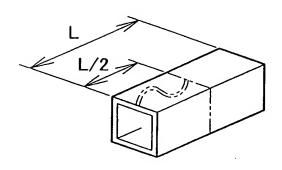
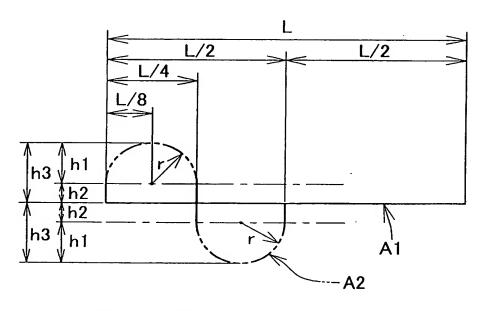


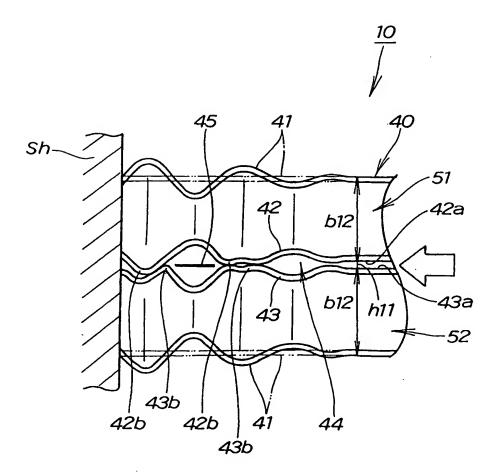
FIG. 6B



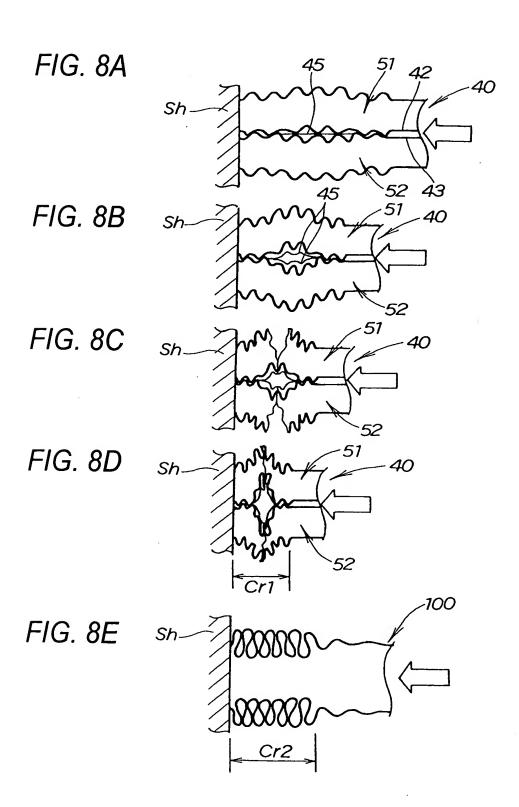
$$r = L/8 = 0.125 \times L$$
  
 $h1 = r = 0.125 \times L$   
 $h2 = (L - 2 \times \pi \times r)/4 = 0.054 \times L$   
 $h3 = h1 + h2 = (0.125 + 0.054) \times L = 0.18 \times L$ 

Inventor: KASUGA Docket No.: 12844.0056US01 Title: VEHICLE BODY FRAME Attorney Name: Curtis B. Hamre Phone No.: 612-336-4722 Sheet 7 of 10

FIG. 7



Inventor: KASUGA
Docket No.: 12844.0056US01
Title: VEHICLE BODY FRAME
Attorney Name: Curtis B. Hamre
Phone No.: 612-336-4722
Sheet 8 of 10



Inventor: KASUGA
Docket No.: 12844.0056US01
Title: VEHICLE BODY FRAME
Attorney Name: Curtis B. Hamre
Phone No.: 612-336-4722
Sheet 9 of 10

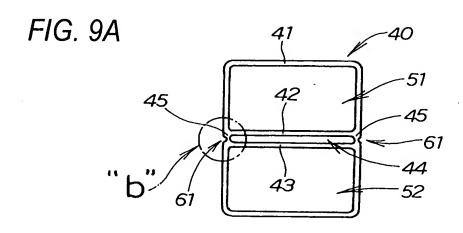


FIG. 9B

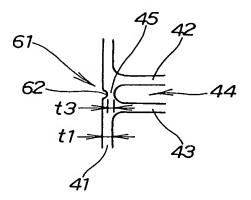
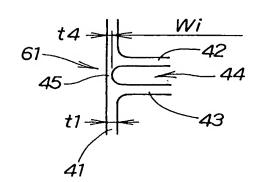


FIG. 9C



Inventor: KASUGA
Docket No.: 12844.0056US01
Title: VEHICLE BODY FRAME
Attorney Name: Curtis B. Hamre
Phone No.: 612-336-4722
Sheet 10 of 10

